

## MAGNETIC RECORDING MEDIA WITH CU-CONTAINING MAGNETIC LAYERS

### ABSTRACT OF THE DISCLOSURE

A magnetic recording medium including at least one Cu-containing magnetic recording layer (CuML) comprised of a Cu-containing magnetic alloy material selected from the group consisting of:

- 5 (a) a CoCrPtBCu alloy having a composition represented by the formula  $Co_{100-x-y-z-\alpha}Cr_xPt_yB_zCu_\alpha$ , wherein  $0 < x \leq ??$ ,  $0 < y \leq 30$ ,  $0 < z \leq 24$ ,  $0 < \alpha \leq 10$ , and  $x + z \geq 35$ ;
- (b) a CoCrPtBCu alloy having a composition represented by the formula  $Co_{100-x-y-z-\alpha}Cr_xPt_yB_zCu_\alpha$ , wherein  $0 < x \leq 30$ ,  $0 < y \leq 30$ ,  $0 < z \leq 24$ ,  $0 < \alpha \leq 10$ , and  $x + z \geq 35$ ; and
- 10 (c) a CoCrTaCu alloy having a composition represented by the formula  $Co_{100-x-y-\alpha}Cr_xTa_yCu_\alpha$ , containing less than 30 at. % Cr, up to 8 at. % Ta, and up to 10 at. % Cu.